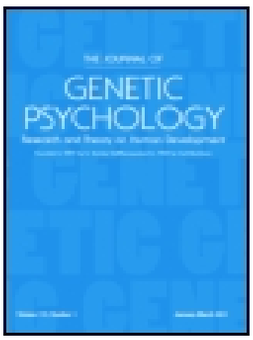

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PLANS OF CLASSIFICATION IN THE PUBLIC SCHOOLS

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Several of the most important plans of grading and promotion in the United States are presented in this paper. Since the short interval, or St. Louis plan, is really the parent of all plans of grading in this country it will be first considered. It will be followed by the Shearer, or Elizabeth plan, which is only a modification of the St. Louis plan. The concentric plan, the North Denver plan, and the group system will then be described, followed by the well-known Cambridge double-track plan and its modifications, the Odebolt and Le Mars, Iowa, plans. The Portland, Oregon, plan is briefly treated. Two German plans will then be explained: those of Charlottenburg and of Mannheim, the latter plan having been widely adopted in Germany.

After a brief introduction, presenting the views of superintendents and normal school principals as to whether the all-class method of instruction is satisfactory as a means of reaching the individual pupils, an exposition is given of the three best known plans of individual instruction, the Pueblo, Batavia, and Newton plans, the section closing with a suggestive plan combining the good points of several that have been presented.

It may be added that there are other plans of grading and of instruction that have attained considerable prominence, but they are so similar in their main features to the plans here presented that it has not been deemed worth while to present them.

The St. Louis Plan

The first comprehensive discussion of the subject of a plan to introduce flexibility into the classification of the graded school system was made by the late Dr. William T. Harris in his reports as superintendent of the St. Louis public schools, during 1868-9 and 1871-72-73. In these discussions he explained the short interval system of promotion as carried out in St. Louis, by which plan pupils, in the lowest grades at least, were to be promoted every five or six weeks during the school year. These three reports aroused wide-

spread discussion among school superintendents throughout the country, some opposing, some supporting. In the report for 1873-74, Dr. Harris entered into a still more detailed discussion of his plan, quoting at length the opinions of several prominent school officials who favored the plan, and also of those who were opposed to the short interval system.

As all the short interval plans are in a way modifications and adaptations of the St. Louis plan it will be well to discuss its chief features at some length.

1. Pupils differ greatly in their ability to do the work of the grades. A pupil entering the first grade at eight years of age can make nearly double the progress that can be made by a pupil of five years of age. The bright, nervous child will be able to advance more rapidly than the one who is dull and stolid.

2. Unless the school provides for these different rates of progress by frequent reclassification, the bright pupils not being held up to work of which they are capable will acquire habits of carelessness and listlessness, while the dull pupil being compelled to move forward at a too rapid pace, will become demoralized and disheartened.

3. Furthermore, the attendance of some pupils is far more regular than that of others, absence being due to sickness, necessity of working for a living, and other causes.

4. Because certain pupils are able to move forward over the course of study at a more rapid rate than their mates and because large numbers of pupils in the upper grades are constantly leaving, some provision must be made to restore the proper quota of pupils to the teachers of the upper grades. This can be done, according to Dr. Harris' plan, by a reclassification and promotion of pupils in the different grades every ten weeks "or once in a quarter or term."

5. Frequent promotion is not to be made by classes, the few best ones in each section or class are to be united with the class or section above. Such a promotion through the different grades will result in bringing together in each section or class pupils of fair, average, and poor ability, together with a few of superior ability who at the time of promotion will stand at the foot of the class. "For a while," writes Dr. Harris, "the average and fair scholars in the class will have the stimulus of being the best in the class. The poor ones will rank as 'middling' and the new pupils will begin as the poorest and slowly work up toward the top of the class. The advantage to the self-respect of the slower pupils which comes from standing in relation to their classmates as abler and better informed is not to be lost sight of."

5. Under this plan where in a large building there are several large sections of the first or second grade, the bright pupils would change teachers several times in one year, but in the upper grades with their small enrollment, the bright pupil would be advanced from division to division, according to Dr. Harris, and still remain one year or more under each teacher.

6. By this plan of promoting the few best, rather than demoting the few poorest, it is claimed that the maximum of encouragement is attained since those remaining in the section after each special promotion do not feel that they have been "left back."

7. If promotions to the high school are made only once a year, the graded schools will be obliged to so arrange their upper classes as to conform to this order of things and the other grades from the first on must follow the same plan.

A class finishing the work of one grade before the end of the year would not be able to begin the work of the next grade until the beginning of the new school year. "The utter want of elasticity in the classification of the upper grades of the district schools," to quote Dr. Harris, "arising from the lack of frequent promotions to the high school, works violence continually to the interests of one-third of the pupils. All those delayed through sickness, the necessities of poverty, or inactive temperaments, either fall back a whole year, or else in a vain endeavor to make up their deficiency overwork themselves or get discouraged." In considering this plan one must bear in mind that it was devised by Dr. Harris as a means of filling up the upper grades of the St. Louis schools which were constantly being depleted by the withdrawal of pupils. It was primarily a plan for hurrying along the bright pupils. "The slow pupils," to use Dr. Harris's own words, "advance only when ready." It is easy to see that under such a plan the bright pupils would be the objective point of the teacher's exertions and the slow pupils would be allowed to drift along. There is reason to believe that even a slow pupil after being passed again and again by his more rapid-minded mates would at last wake up to the fact that he was "stranded" in the stream of progress.

It is maintained that the only disadvantages incident to the plan are connected with the frequent changing of teachers. This objection is dismissed by asking the question if it is desirable to keep a pupil back in his studies in order that he may recite for a long time with one teacher. This answer is hardly fair since there are ways of keeping pupils with a teacher, for

a year at least, while still allowing them to make rapid progress.

Yearly promotions to the high school are said to be detrimental to the interests of at least one-third. Yet there are school systems that have yearly promotions and that make little of "sectioning" the lower grades, where for five years the percentage of pupils failing to earn promotion from grade to grade in the elementary schools, has averaged each year less than seven. The best evidence of the efficiency of the plan would be from the records of the public schools of St. Louis. It is, however, a significant fact that after all these years with the short interval of grading, both in St. Louis and Kansas City, there exists a large amount of retardation in their schools.

The Elizabeth Plan

The Shearer, or Elizabeth plan, of grading was developed and perhaps best carried out during Mr. Shearer's superintendency at New Castle, Pennsylvania. The name, Elizabeth plan, came about from the fact that after Mr. Shearer left New Castle to assume the superintendency of the schools of Elizabeth, New Jersey, he put the plan into operation in the schools of the latter city, but the plan was never carried out in the latter place in any thorough-going manner and is not in use there at the present time. Under the plan each of the eight grades is divided into three or four sections according to the abilities of the pupils. Each of these sections is allowed to do just as much work and go forward just as fast as it is able. There are no promotional examinations and as soon as a pupil shows ability to do the work of a higher section he is advanced to that section. Progress is gauged by the work on the sequential studies, reading and number in the lower grade, language and arithmetic in the higher grades.

The advantages of the plan are stated in Superintendent Shearer's own words.[1]

"1. It makes possible a frequent reclassification which is the only means of preventing the sacrifice of the pupils of the graded school. When a pupil gets ahead or behind his own class, he is at once moved a short distance forward or back, where he can work to advantage.

"2. An accurate grading of pupils, according to ability into classes of from ten to fifteen, instead of herding them in classes of fifty, furnishes a practicable means of reaching each individual.

"3. Every pupil is touched with hope and with enthusiasm; for the progress of each one depends entirely on ability and application.

"4. Forty-two per cent of the pupils in the highest grammar grade, having finished the work of that grade by January, at once started

[1] Discussion N. E. A. Proceedings, 1895, pp. 408-9.

upon the work of the high school, and will be able to graduate in three years instead of four years.

"5. By the end of the first year's trial of the plan, forty-five per cent of the pupils below the high school had gained from one-fourth to two-thirds of a year's work, without any urging on the part of the teachers."

The writer after an experience of several years in schools graded under the plan would make the following criticism of it:

1. It is not essentially different from the plan advocated and carried out by Dr. William T. Harris in the St. Louis schools from 1871 to 1873.

2. It is essentially a plan for enabling bright and often superficial pupils to move rapidly through the grade.

3. Because of this aim, the teacher puts her energies on the best pupils. The slow and dull pupils do not receive the attention that they need.

4. The number of divisions dissipate the energies of the teacher and poorer work is the result.

5. Since there are so many divisions a large number of pupils are engaged for long periods in seat work or "busy work, which often is rendered worse than valueless because the teacher has no time to supervise it properly. Two sections are all that any teacher should be obliged to look after.

This plan has been widely advertised as the result of an article, "The Lock-Step of the Public Schools,"[2] written by Mr. Shearer in 1897 for the Atlantic Monthly and widely commented on by the press of the country. It is also fully explained in a book, "The Grading of Schools," written by Mr. Shearer. The above-mentioned article and Mr. Shearer's book, together with many newspaper articles and addresses by him, have done a great amount of good in calling attention to the need of a better organization of the graded schools in order to adjust them to the needs of the individual child.

The Santa Barbara Concentric Plan

According to this plan children in each grade are divided into three groups so that each grade has A, B and C sections. "The sections do the work of the grade concentrically." The extent of the work so far as the fundamental principles are concerned is the same for each of the sections, but the B pupils do more extensive work than the C pupils and the A more than the B pupils. In arithmetic, for example, the C pupils would take only such work under a certain topic as would enable them to advance to a consideration of the succeeding

[2] Atlantic Monthly, Vol. LXXIX, pp. 749-757.

topic; the B pupils would do more difficult work while the A pupils would approach the subject in a more thorough manner, learning, perhaps, short processes and methods of proof, things beyond the powers of a great many pupils.

When the A pupils of any grade are ready for the work of the next grade they are transferred to the C section of that grade, while there may be constant transfer from section to section within the grade.

This plan was carried out in the schools of Santa Barbara, California. Mrs. Burk[3] has made a very interesting study of the results of the plan, showing the number of sections covered by 835 children during a school year.

No. of Sections.....	0	1	2	3	4	5	6	7	8
No. of Children.....	28	58	195	369	74	75	30	1	5

From this record it can be seen that if we adopt three sections of work a year as the normal, that 34% of the children made slow progress, 44% normal progress, while 22% made rapid progress. In this study it is shown that 35% of the slow children were absent over 20 days as compared with 33% of the normal and 23% of the fast children. It is also shown that in the first three grades 47% of the children were slow, 36% normal, and 17% fast. In the fourth and fifth grades 16% were slow, 53% normal, and 31% fast, while in the sixth, seventh and eighth grades 30% were slow, 50% normal, and 20% fast. This study would seem to indicate the truth of what a great many school men believe, that the course of study for the first two or three grades and that of the higher grades is too difficult for a large number of children. The study also takes the scientific point of view, emphasizing the fact that "the normal child of one year is not the normal child of another year." Other studies along the same line would do much to counteract the evil which many studies in school retardation are now doing by overemphasizing the over-age problem of the schools. The over-age problem in the schools is not to be solved by lowering the compulsory attendance age from seven to six as Superintendent Maxwell of New York City seems to think. School attendance in the German cities where the compulsory age is six makes this evident. The problem of retardation and elimination is as great a problem with them as with us. The studies in retardation have doubtless done much to direct attention in the right way but they are lame and halt in many

[3] Educational Review, Vol. 19, p. 299.

respects. They fail to take account of local conditions in their comparative estimates, judging by the same standard the city in which the children enter school at five years and another city in which the larger part of the children do not enter school until after they have reached the age of six.

CAMBRIDGE PLAN

The plan of grading that has been most often described in books on school administration is the so-called Cambridge double-track plan. This plan was evolved and was in use in the schools of Cambridge, Massachusetts, for many years. It has now been replaced by a somewhat different plan. It was applied only to the last six years of a nine-year course of study. Under this plan, running parallel with the regular six-year course, was a shorter course by which abler pupils might accomplish the regular work in four years. These four sections of the work were called the A, B, C, and D grades. A pupil entering and completing this course, saved two years in the nine-year course. There were, as can be readily seen from the accompanying diagram, two other ways of completing the course with a saving of one year in each case. A pupil could complete the A and B grades in two years and then at the close of the year be promoted to the regular seventh grade, thus completing the course in eight years; or he might save a year by progressing regularly through the fourth, fifth and sixth grades and then, by being transferred to C grade, complete the work in the two succeeding years. The plan was carried out in this way. All the pupils began the fourth grade on, as it were, the same line of attainment. As soon as possible the pupils were separated into a slow and fast division, the slow division constituting the regular fourth grade and the fast division the A grade. The pupils of the A grade did the work of the fourth grade and about one-half the work of the fifth grade. The next year the slower pupils constituted the regular fifth grade while the faster pupils were promoted to the lower division of the sixth grade and during the year accomplished the remaining half of the fifth grade work and also the work of the sixth grade, so that at the end of the year they were abreast of the regular sixth-grade pupils. In a similar manner the brighter pupils of grade six were promoted to grade C, and by doing a half-year of extra work each of the two succeeding years, finished the course in grade nine with the pupils who began the sixth grade three years previous.

Under the plan there must be two divisions or classes for at least the major part of the time in the fourth, sixth, seventh

and ninth grades. The regular fifth and eighth grades will be composed of the slower pupils and will work as one class.

Objections to Cambridge Plan

The following objections to the plan are presented by a Cambridge teacher:

1. "In order to make fast or skipping classes large enough to make them worth while, it is necessary to place in them children who cannot do the work as it should be done.
2. The children in these skipping classes go over the work so rapidly that they do not get the thorough systematic drill that they need.
3. The selection of the best pupils from the regular classes leaves an accumulation of slowness and the teachers complain of the dullness of their classes.
4. It allows for promotion only once a year." There seems however to be no good reason why in buildings employing sixteen or more teachers this plan could not be fitted to the half-year interval plan of promotions. This could be done by dividing the course of study into two parallel courses: a longer one of 18 sections and a shorter one of 12 sections. The transfer point would occur just twice as often as under the yearly plan.

Le Mars, Iowa, Plan

The Le Mars plan is the Cambridge plan applied to the nine grades instead of only the last six grades.

The courses of study are made out covering the same amount of ground but differing in the time required to do the work; one requiring six years, the other nine years. These courses run parallel with each other and are so arranged that they articulate with each other at different points along the line. Classes are so graded that they come together at different points, thus allowing for a transfer of pupils in either direction without a loss of any portion of the course of study. The short course of six years is divided into three two-year cycles and the long course of nine years into three three-year cycles. The end of each cycle is a transfer point. The grades of the short course are designated by the letters A to F; those of the long course, by the figures one to nine. The plan is worked out in this way: Grades 1 and A begin work together, but soon after beginning the work of the year the two grades or divisions begin to diverge in their work so that at the end of the year grade one has completed one ninth of the work, and grade A one-sixth of the work. At the beginning of the second year the pupils of grade one are pro-

moted to grade two, while the pupils of frade A are promoted to grade B and begin work in the room with the pupils constituting grade three. The early part of the work of grade B is more elementary than that of grade three, but grade B with its abler pupils finally overtakes grade three so that at the end of the year the pupils of the two grades have finished one-third of the course.

Results of the Plan

In June, 1908, 60% of all the pupils in the Le Mars schools were promoted to the nine-year course; 40% to the six-year course; 48% of the promotions were transfers.

In Odebolt, Iowa, where this plan is in use, at the end of the sixth year 54% of the pupils were in the nine-year course and 46% in the six-year course.

The record of promotions made in the Odebolt schools for the four years ending June, 1908, is as follows:

Regular promotions in the six-year course.....	34.5%
Regular promotions in the nine-year course	29.3%
Transfer promotions	35.5%
Non-promotions	1.7%

For this period 29% of the pupils worked altogether in the six-year course; 22% altogether in the nine-year course, while 49% worked in both courses. The lines in the diagram represent the different actual courses as the resultant of the two parallel courses articulating. Course 1 is the regular nine-year course. Course 2 takes a pupil through grades 1, 2, 3, C, D, E, F, completing the work in seven years. Course 3 carries pupils through grades 1, 2, 3, 4, 5, 6, E and F, completing the work in eight years. Course 4 carries one through grades 1, 2, 3, C, D, 7, 8 and 9 in eight years. Courses 5 and 6 are each seven years in length. Course 7, eight years, and Course 8 is the regular six-year course. Thus, beside the two regular courses there are three seven-year courses and three eight-year courses. Under the plan there are four kinds of promotions: the "regular" promotion by which a pupil is passed from one grade to the next higher in the same course, the "transfer" promotion by which a pupil is placed in the next higher grade of the opposite course occur at the end of the year. The "advanced transfer" promotion by which a pupil is transferred 4 to D out of course to the next higher grade of the opposite course (such a transfer necessitates skipping certain portions of the work) and the "retarded transfer" promotion by which a pupil is placed in a

lower course and given the benefit of a review before taking up advanced work (but without loss of time) may occur at any time during the year.

The intervals that separate the different classes may be seen from the following table:

TABLE OF INTERVALS BETWEEN CLASSES

Between Grades.	Time.	Interval.
4 and C,	Beginning of year,	Zero
4 and C,	End of 3rd month,	4 weeks
4 and C,	Middle of year,	6 weeks
4 and C,	End of 6th month,	8 weeks
4 and C or 5 and C,	End of year,	12 weeks
5 and C or 6 and D,	Beginning of year,	12 weeks
6 and D,	End of 3rd month,	8 weeks
6 and D,	Middle of year,	6 weeks
6 and D,	End of 6th month,	4 weeks
6 and D,	End of year,	Zero

The table shows that the interval between two classes throughout the course is never more than twelve weeks and for most of the time only four to eight weeks. Thus opportunity is afforded frequently to adapt the course to the needs of both the slow and the quick child. The pupil of superior ability is not compelled to mark time. The pupils of slower development are not compelled to hurry over the work. The course is pliant at all points. The pupil is promoted on the estimate of the teacher and as soon as the work at any point in the course becomes too hard or too easy for a pupil, such pupil is reclassified.

PORTLAND, OREGON, PLAN

A unique system of classification and promotion has been in use in Portland, Oregon, since 1897. It superseded the orthodox eight-grade system with semi-annual promotions.

The course of study is divided into fifty-four parts covering in time eighteen terms of five months each. Promotions take place at the close of each term. A unit composed of three terms is called a cycle. While classes are permitted to go forward at the rate best suited to their powers, the two standard rates are three parts per term for the slower divisions and four parts per term for the faster divisions.

The normal class interval at the beginning of a cycle is three parts of the course of study measured not in time but in work. In large schools the class interval is often only two

parts of the course. Sometimes in the lower classes only one part of the course separates the classes.

At the beginning of a cycle such pupils as have reached the same point of progress in the course of study are classified in two divisions; the first division is to advance at the rate of four parts per term while the second division is advancing three. It can be readily seen that by going forward at the same rate, at the end of three terms, the first division will have covered twelve parts of the course and the second division will have covered nine. At the end of each cycle each first division will have reached the same point in the course as the second division next above. Again a reclassification will take place and the first and second divisions will begin another cycle and so on in like manner until the fifty-four parts of the course are completed. The pupils who remain in the first division throughout the course will complete the work in seven years. Those who remain in the second division throughout will complete it in nine years.

North Denver Plan of Instruction

Superintendent James J. Van Sickle, now of Springfield, Massachusetts, devised a plan while superintendent of the North Side School of Denver, Colo., for producing "greater flexibility in class management, especially in the grammar grades." He contended that "the short and varying intervals in the primary grades together with the half-year interval in the upper grades were sufficient for the ordinary class organization of the school. The finer adjustments in individual cases should be made within the class. No mechanical plan of grading can adjust itself to the individual differences of the pupils." "The child," says Van Sickle, "who is strong in arithmetic may show less strength in language, while another, good in both, may need more time in geography or history, and so on in indefinite variety,—while the average strength of the individuals composing the class may not vary greatly. No matter how carefully we grade, we find these differences."

The ordinary recitation is ill adjusted to the varying gifts of the pupils: if the bright pupils' ability is made the standard of class speed the average and the slow are hurried on too fast; and bright pupils lose interest and develop wasteful habits, if the standard is adjusted to the abilities of the average and slow pupil.

"Is it not possible," says Mr. Van Sickle, "to retain the manifest advantages of the class recitation, so often set forth by Dr. Harris, and yet as the recitation progresses allow in-

dividual pupils to drop out and do other work more profitable than simply maintaining the semblance of attention?"

AIMS OF THE PLAN

1. To secure a more profitable use of the pupils' time.
2. To train each pupil to use his own judgment by co-operating with the teacher in deciding what he had better do at a given time.
3. To lead the pupil in this way to put forth more willing effort in the mastery of the less agreeable studies, such effort aiding to keep the pupil up to the level of the class.
4. To secure more study time in school and thus do away with the need of keeping after school (staying after school, says Van Sickle, is quite a different matter).
5. To enable the pupil to demonstrate his fitness for special promotion.
6. To bring about conditions that will awaken enthusiasm for improvement in efficiency and in knowledge, by emphasizing the fact that it is individual power, the excelling of one's self, that counts, rather than class marks, special seats, or the other school rewards given for excelling one's mates.

The main aim is thus to develop individual initiative and responsibility by leading the pupil to decide for himself when he is ready to do certain work or when he has finished such work, and to develop the will power necessary to do a piece of work alone. Under the usual plan of organization the teacher makes all the decisions; the pupils have no opportunity to develop independence of power that comes through making choices of real value. It is for this reason that the school-room is often inferior in its educational power to the athletic field; in the schoolroom the pupil is too often being developed; on the athletic field he is developing himself. It is the self-activity,—the subjective power that counts for most in education.

PROCEDURE IN CARRYING OUT THE PLAN

There is a certain minimum requirement in all studies to which all pupils are held.

While the pupils who need all the assigned time to complete a particular study are engaged upon such study, the more

capable pupils " are, by process of natural selection, detaching themselves temporarily from the class in order to work on some study in which they are weak, or for broader or deeper study of some topic by means of reference books, gathering illustrative material, or following out some line of interest approved by the teacher." (In North Denver each room was provided with a carefully-selected reference library of from fifty to seventy-five volumes).

Those pupils who have been excused from the recitation may at any time be called back to the recitation to help in the clearing up of some point for the other pupils, being in this way at all times held responsible for the work that is being done. In case such a pupil fails to respond at any time either in advance or review work, such failure is held as indicative of the fact that he has not attained such a degree of efficiency in the minimum requirement as to permit of a continuance of his release from the regular class work; this release is therefore canceled. Such experiences tend to stimulate the pupil to make his mastery of the subject more permanent, not for the day only. In this way the pupil's judgment is developed.

"A pupil may at any given time find the minimum in arithmetic or geography all that he can do while at the same time he is making a fuller study than some of the rest, of a period in history." For this privilege he is willing to work more energetically in the subjects in which he is less able. It is easy to see that here there is an opportunity for the school to foster in a systematic way the bent of individual pupils.

Individual pupils may be called upon from time to time to give the results of their extra reading or research to the class. In this way may be cultivated the desire for social service. The pupil gives the results of his work to the class. He is making himself socially useful. " His success awakens a desire in others to be able to make creditable contributions of the same kind; thus all are stimulated to do independent work in spare moments and to find spare moments for independent work. They learn how to find things in books. This is perhaps the most useful accomplishment that we can cultivate in a child. Books must always be his chief reliance after leaving school."

Characteristics of the Plan

It is not a rapid transit plan for hurrying pupils over the course of study.

The class is ready " with an even front " to attack each new lesson.

The new lesson is first developed with the class as a whole.

One pupil does not travel faster than another, but he may get more. The road is wide as well as long. "It is not so much to the pupil's advantage to go through the grades rapidly as to get all that he is capable of getting while he is going through."

"The plan tends to even up the pupil in the various studies, since making pleasant excursions in favorite studies is conditioned upon fair attainment in all studies."

The additional study time makes less home work necessary.

The teacher has more time to devote to the less able pupils without injury to the others.

It tends to develop the latent powers of the pupils.

It gives the teacher an opportunity to judge of the fitness of individual pupils for promotion to the next higher class.

It thus gives opportunity for really able pupils to be promoted whenever they show the requisite ability.

In a class that is well graded every pupil will find some study from which he may be released now and then. The plan is thus a source of encouragement to all. It stimulates steady growth in the pupils. The motives held out of spending one's time profitably, of increasing one's store of knowledge, of being socially useful, and of gaining the power of self-mastery, are of the greatest value.

The plan demands of the teacher more thought and a somewhat broader preparation than the old plan. But there is compensation for the extra expenditure. The "active spirits" in the room are kept profitably employed with self-imposed tasks. The spirit of work thus gained solves nearly all problems of discipline. The plan requires that the pupils be given more freedom than is customary but, as Van Sickle points out, the seeming perfect order of the old-time school room with everybody sitting up straight, no whispering, no moving about is not indicative of a good school if every thing is done on the initiative of the teacher.

Below are some of the results as shown by the work for one year:

"In the eighth-grade class this year, 4 have finished, or will have finished, the eight-year course in less than six years, 7 in six and one-half years, 21 in seven years, and 24 in seven and one-half years. Able pupils are not kept marking time, but are advanced whenever they show the requisite strength. The half-year interval does not prevent this. The year interval would add materially to the difficulty.

In the two buildings in which this plan of class management has been systematically tried there has been apparently greater attention to individual needs than in the other build-

ings. One hundred and sixty-one pupils finish the work of the eighth grade this year in three buildings. In one building, 57½% finish in eight years or less; in another, 62½%, and in the third, the one pursuing the ordinary plan, only 37½%."

This would seem to indicate that the plan tends to conserve the interests of individual pupils. There are many points of excellence in the plan that can be used under any system of classification.

The greatest difficulty that the writer has experienced in getting teachers to apply the main principles of the plan to their work lies in the fact that they have been trained in the normal school to think that all pupils must be engaged upon the same task at the same time. They cannot see that there can be class unity without class uniformity. The principles of the North Denver plan tend to do away with class uniformity and to promote class unity. Under it the ambitious pupil is given an opportunity to add to his spiritual wealth and while so doing to cultivate initiative and responsibility, powers that the modern school is charged with failing to develop.

The Group System, which will be described in the next chapter, is in reality only a modification and extension of the fundamental idea of the North Denver plan.

The Group System

The Group System of teaching has been given more or less attention by school men and has attained success in the schools of New York City. According to one writer the Group System has certain points of resemblance to the Elizabeth and to the Batavia plan. It is asserted that while in no sense is it the plan of the old ungraded school yet it does apply to the modern all that is good in the ungraded school plan. It provides a different rate of progress for children of different abilities. It succeeds according to certain of its advocates by placing emphasis on the old-fashioned drill by translating the hum drum of this drill into independent study. The aim is to cover the work assigned in such a manner that every child has a chance to do the work well. The essential aim is not the rapid advancement of the bright pupils, although by its use a bright child may advance as rapidly as he can cover the work with thoroughness. Its real merit lies in the fact that it enables the slow and backward pupil to keep up with his grade.

The plan may be carried out in two ways: on the basis of the Constant Group or on the basis of the Shifting Group.

Under the Constant Group the pupils of the class are formally divided into groups to be maintained for a definite period. The promotions from group to group occur only at stated times. The pupils are classified according to their ability to advance. There are usually two or three groups. This method of grouping requires divisions in nearly all the subjects of the course of study and the pupils in the most advanced group may pass to a higher grade, although they may be unprepared in certain subjects.

Under the Shifting Group, the children are divided according to their power really to grasp a new point. "Thus the teacher may have as many groups as she deems advisable in as many subjects as she chooses. The pupils may not be grouped in all subjects nor is the membership of the groups constant. Pupils may be promoted from group to group any time. There may be two groups in reading for example, and three in arithmetic or language. Occasionally bright pupils may be promoted to a higher grade but this is not the main aim of the Shifting Group. The aim is to make the bright child do thorough, careful, work and to bring the slow child up to the grade standard while the aim of the Constant Group is to advance the bright child as rapidly as possible.

The advantages of the Constant Group may be summed up as follows:

1. It is economical. The bright pupil goes along from grade to grade as fast as he is able, thus making room in the lower grades for the admission of new pupils, thus lessening the demand for more rooms and more teachers.
2. The bright pupil, not being compelled to mark time will retain a greater interest in his work.
3. Standards of scholarship will thus be improved and the membership in the higher grades will be increased.
4. Because of the small groups the teacher will be able to reach individually those pupils who are weak in one subject and thus enable such pupils to advance with their grade.

Certain disadvantages are mentioned:

1. Rushing children through the grades tends to superficiality and lack of thoroughness and is likely to undermine the health of nervous ambitious pupils.
2. The formality of the Constant Group tends to cause the teacher to lose personal touch with the pupils.
3. Acquirement of a certain amount of knowledge is made the standard of advance and undue stress is likely to be placed on tests and examinations.
4. The dull and slow children are likely to be misunderstood and neglected.

The advantages claimed for the Shifting Group are as follows:

1. No child is slighted or neglected. The bright child does thorough work and is kept up to the mark by reviews and drills.

2. He learns how to study and has time to form habits of study.

3. Children in the slow group are given more time for instruction and thus brought up to grade, and pass with their brighter fellows to the next higher class, although they may not have covered as much ground in all subjects.

4. Every child receives personal attention and instruction from the teacher.

5. Since this does not require grouping in all subjects, certain branches may be taught to the class as a whole, thus retaining the advantages of having the class recite together. The studies for grouping are usually reading, arithmetic and grammar.

The method of carrying out the Group System is somewhat as follows:

1. The new lesson is presented to the class as a whole. A short test following the lessons reveals such pupils as have not mastered the new points and so need further instruction.

2. At the next recitation only those pupils are called to the class who failed to grasp the points at the previous lesson. The others, whom we may call Group A, remain at their seats to do extensive study. Those who have been called to the recitation, whom we may call Group B, again go over the lesson of the previous day, attacking it from a new point of view. A test at the end of this period will probably reveal a small number of pupils from this group who have as yet failed to grasp the essential points of the lesson.

3. This group, called Group C, will come to the recitation for a third period of study on the lesson, while Group B will be assigned study work similar to that assigned Group A, on the previous day, and the latter group will be given new work.

4. After the pupils in Group C have grasped the work the class is reassembled and another section of new material is presented to the class as a whole.

According to one writer, the main objection to the plan is the difficulty in arranging for real or study work. Unless such work is carefully planned for and is carefully supervised it tends to foster habits of slovenliness and idleness. Rightly planned for and supervised it cultivates that most valuable of all habits, the power of independent work.

The Charlottenburg Plan

Charlottenburg, the largest suburb of Berlin, has lately reorganized its school system to make it better meet the needs of the children. The school officials have come to the conclusion that a rigid course of study, which all the children are required to pursue, while it may meet the needs of the children in the smaller cities and towns, is not adapted to the needs of the children of a great city, whose mental and physical endowments are the result of such varied influences in both the home and in society at large. They have sought to meet these conditions by adjusting the school organization to the abilities of the children.

The six-year-old children, who are unable to meet the demands of the regular school classes, are placed in small preparatory classes of 24 pupils each and given instruction that partakes largely of the nature of the kindergarten.

Regular instruction for the abler children who begin school work is given in classes of not over 45 pupils each.

Those children who cover the course in this class are promoted to Class Six, the lowest regular class of the six-grade course; those pupils who fail are given the opportunity of entering a class only a half-year below in point of progress.

For the backward pupils the course is so arranged that on finishing the *Grund-klasse* they enter Class Six B. The course for the B classes is divided into half-year sections, thus making promotion or demotion easy. The membership of the B classes is limited to thirty. These B classes correspond to the furthering classes of the Mannheim system. They are separate from the special auxiliary schools which are for children with mental defects.

By means of the selective process in these B classes it is easy to determine the children who need the aid of the auxiliary schools. The Charlottenburg plan makes it possible to individualize instruction at every step of the course and to treat the child according to his ability and his present needs.

As can be readily seen, the Charlottenburg plan is not different in its essentials from many of the plans which have been worked out in our own schools.

The two important features of the plan are the special provisions for private help for such children as are failing in their studies, three hours a week being devoted to this work; and second, readjustment of the course of study by diminishing the amount of abstract memory work and placing greater stress on the concrete things in the child's environment, on drawing and allied work.

The Mannheim System

In Berlin, from 1896 to 1899, only about 61% of the children reached the highest classes of the *Volksschule;* in Charlottenburg, from 1890 to 1900, some 50% of the pupils left school, having covered only a part of the elementary school course. In other city systems of Germany the conditions were still worse. In Mannheim during the last two decades of the last century only about a fourth of all pupils were being carried through the highest grade.

These failures were attributed to overcrowded classes, to over-difficult courses of study, to child labor, to absence, and to frequent changing from school to school. These reasons did not constitute the chief cause in the minds of many school officials; among them was Dr. Sickinger, superintendent of the schools of Mannheim. He attributed the failures to the fact that the school did not take account of the differences in the learning ability of the children. The children in the schools were being treated as if they all had the same powers of mind, hence, the failure of large numbers to profit by the instruction offered.

The Mannheim system of school organization was established in 1899 and is an attempt to remedy the difficulties pointed out above, by adapting the organization of the schools to the needs of individuals.

The Mannheim plan consists of a system of special classes running parallel to the regular classes of the *Volksschule.* In these special classes or "furthering classes" as they are called, are placed those pupils who, for one reason or another, show themselves too weak or too slow to do the work of the regular classes. Such pupils are grouped into classes that form six grades running parallel to the six regular grades. These classes are organized on the same plan as the regular classes and do much the same work, although less extensive. It has been found, however, that a special course of study should be arranged for these six grades.

It would appear from the accounts of the Mannheim system that have been written in English that there is a constant interchange of pupils between the regular classes and the "furthering classes." This is not the actual condition of things in Mannheim.

During the year 1907-8, out of 2354 pupils enrolled in the "furthering classes," only seven gained extraordinary promotions within the school year to a higher grade of the regular classes, and only seven to a higher grade of the "furthering classes." At the end of the year only 123 pupils from

these classes were promoted to higher grades of the regular classes. 1741 were promoted to "furthering classes" of a higher grade, 103 to a "furthering class" of the same grade; 18 were sent to the auxiliary classes and 359 withdrawn from school.

It is clear that the "furthering classes" are almost exclusively for a special class of children who have little hope of gaining the regular classes, only 5.2% of the number enrolled being able to accomplish this end.

In commenting on these figures Dr. Sickinger writes in his yearly report for 1908 as follows: "These results are a confirmation of the view previously presented of the character and object of the 'furthering classes.' The deficiency which is peculiar to the pupils in the 'furthering classes,' shows itself chiefly, not as a gap which has arisen through conditions of neglect in the course of instruction but as lack of ability inherent in the nature of the children." "The capacity of the children for school work," according to Dr. Sickinger, "is in consequence of physiological, psychological, pathological and sociological conditions so variable that it is impossible, as promotion statistics show, to carry forward on a level through the same course of study and within the compulsory school age, from six to fourteen, all children obliged by law to attend the folk-schools."

On this conception the differentiation which characterizes the Mannheim organization is built up.

The pupils are separated, according to their individual endowments, into three groups. The mentally defective, who under ordinary conditions must be sent out from the lower grades as illiterates are assigned to the auxiliary schools which represent in their organization the first four grades of school work; next, the normally endowed children who are expected each year to be capable of gaining a promotion, are assigned to the regular classes of the regular eight-grade course; then those children, who while not abnormal, still are classed as below the average, are placed in the so-called "furthering classes." These classes are the main feature of the Mannheim system. Instead of being carried along with the regular classes about 10% of the children enrolled in the folk-schools are segregated and taught in these "furthering classes," numbering not more than 38 pupils each. Not all German school men are in favor of the Mannheim system. The chief argument against it seems to be that so much extra machinery is not necessary to give the best results both to the bright pupils and also the backward.

Pretzel, writing in the Die Deutsche Schule, makes a strong point of the fact that the gifted pupils are needed in the classes to spur on the backward by their example.

A writer in the Pädagogische Zeitung of August, 1906, criticises both the Mannheim and the Charlottenburg plans. He says that the fault in the system of schools lies in a too difficult course of study which is causing an overtension of the powers of all the children, quick as well as slow. The remedy for this is not a division of pupils into classes according to their mental ability as has been done in Mannheim and Charlottenburg, but a simplification of the course of study so that all but the very few can accomplish it. For these few a second year in a grade will not be a detriment but a benefit. The "furthering schools" are to him unnecessary. "Where," he asks, "is the division of pupils into mental groups to stop? In Mannheim are the three divisions, but Charlottenburg has gone a step further and established a fourfold division. The very bright at the top, then the normal, then the backward and finally those who must be taught in the auxiliary school." The criticism closes with the admonition that among all these charitable arrangements in the school system the normal child must not be lost sight of.

Promotion Classes For Gifted Pupils

Democracy should not keep talent in the quarantine of mediocrity. Thus the discovery and fostering of talent and the setting it to work in the interests of society should be one of the main aims of education in a republic. Society is just beginning to see that equality before the law must not be confused with natural equality. This confusion has doubtless led to some delay in society's concern for the highest development of its human resources. In the old form of caste education, the son could not rise above the station of his father. The fear that a differentiated education would develop caste has, doubtless, led many to assume that in a democracy all should be educated alike. This fear is well founded if the development of superior powers leads, in general, to a drain upon society in the way of wasteful luxury, inordinate pleasure-seeking, and immoral example, evidenced by a degenerate, ease-loving progeny. But democratic society is coming more and more to see that this following of false ideals of life by some of its members is due to its own failure to provide proper educational opportunities for all its children. The people's schools have all along been cheap schools, far too cheap to be educationally efficient. This fact has led Dr. C. W. Elliot to assert that American schools can

never do their work well until the people make some approach to paying for public education what many parents are now willing to pay for the private education of their children. Dr. John Dewey never said a wiser thing than this: "What the best and wisest parent wants for the education of his child that should the community want for all its children." Some writers and speakers, more prominent than wise, are forever dinning our ears with statements concerning the vast sums the nation is expending for education, which in the aggregate seems amazingly large, nearly $400,000,000 for 18,000,000 children; an expenditure, however, when looked at from the individual side of less than twelve cents a day per pupil. Almost no American community spends twenty-five cents a day per pupil for education; yet even the moderate-priced private schools charge at least a dollar a day per pupil for tuition alone.

Public schools can be made better than the best private schools for a reasonable expenditure, but to be reasonable it must be much greater than the present expenditure for school purposes. In many places school officials are kept in office because they can manage the schools on a small expenditure of money, not because they can make the schools more efficient.

Why should it be a matter of surprise for a man of means to send his sons and daughters to the public schools? The reason why public education often gets such scant attention at the hands of legislators, both state and national, is because the leaders in such bodies often have little real personal interest in public education because their own children are in private schools. Witness the penurious policy of Congress toward the National Bureau of Education in its recent attitude toward appropriating some $75,000 for establishing special lines of educational research.

Society can never suffer from the evils of the caste system if it is willing to provide proper education, not cheap education, for all its children, to the extent of conserving and developing human power wherever found. Under this scheme normal, subnormal and supernormal members of the community will each be provided with educational opportunity, and encouraged and aided to develop up to the full extent of individual ability.

Our educational scheme has been organized to fit the average normal child. Until very recently it had never occurred to educators to differentiate the educational scheme to fit different degrees of mental endowment.

In speaking of the establishment of special schools in

America, a German writer in Die Hilfschule states, that their development has been slow because their establishment was thought to violate the democratic ideal of human equality. This ideal has had to give way before the advance of scientific knowledge, especially in the realm of the psychology of the feeble-minded. It is now generally accepted that these mentally weak members of the human family can never by any human means become normal men and women. They can, however, by specially organized schools with a special curriculum and specially trained teachers be vastly improved in their mental, moral, and physical condition, and to a greater or less degree made self-supporting, and by proper supervision made less a menace to society.

Society has of late years given a great deal of study to the subnormal or feeble-minded child, although much remains to be done even here. No doubt much will be done in the next few years in the line of investigating the pathological causes of mental retardation in normal children.

Lugaro[1] points out that "Investigation into subjects in whom the mental deficiency is very slight, into the so-called deficient or backward children, would be of especial interest because they already present from the clinical and psychological sides many differentiating signs which in all probability are dependent on extremely diverse pathological processes." We may thus some day discover the neural causes of backwardness.

On the other hand almost nothing has been done to investigate psychologically or in any other manner the possession of superior mental endowment by certain children.

We do not know how many such children there are in the average community. We do know that about 1% of the children of school age in a given community are so feeble-minded as to need special schools, that from 7 to 10% more (Goddard says 15%) are so backward as to need supplementary teaching in the way of individual help either by special individual teachers (Batavia Plan), by Parallel Classes (Mannheim System), or in the ungraded room (Adjustment Class). We do not know, however, of the 85 to 90% of the school children who remain, how many are gifted with superior mental powers to such a degree that instruction should be differentiated for them.

Dr. T. G. Bonser[2] thinks that "perhaps the worst type of retardation in the schools is withholding appropriate promo-

[1] Modern Problems in Psychiatry, p. 234.

[2] The Reasoning Ability of Children of the Fourth, Fifth and Sixth School Grade. Teachers College, 1910.

tion from those pupils who are the most gifted, therefore of the most significance as social capital." This statement is made as a result of a study of the reasoning ability of children of the fourth, fifth, and sixth grades. Dr. Bonser found that many children of the fourth grade had mental powers superior to many children in the sixth grade, yet the graded system made no provision for the adequate development of these powers.

Dr. G. M. Whipple of Cornell, it is reported, will soon open a clinic to be especially devoted to the study of the supernormal child. In commenting on the fact, Dr. J. E. Wallin [1] makes the assertion that the supernormal child has been most neglected of all, due, he thinks, to the fact that the children on the plus side of the efficiency curve are not so numerous as those who constitute the retarded group, and to the fact that they do not trig the wheels of the school machine. "But the supernormal, or precocious child, is the incipient genius."

Dr. H. H. Goddard[2] in his recent study of some 2000 school children of a certain school system is authority for the statement that about 4% of the children in the public schools possess mental power so superior to the average child as to demand special opportunities in the way of special classes and courses of study for its development. For ascertaining the degree of mental ability or mental age the Binet-Simon tests were used. Children whose mental age was more than two years above their chronological age were considered as possessing mental power sufficient to entitle them to be designated as "gifted." It is to be doubted, however, whether a child who exhibits power to answer the questions three years above his mental level could thereby be considered so gifted as to require special educational advantages without further tests. The child's previous environmental conditions may have played an important part in giving him knowledge sufficient to answer many of the Binet-Simon questions.

The suggestions of Meumann[3] along the line of determining the degree of mental endowment (Begabung) by finding the relation between practice and ability to execute, by establishing norms of performance by which we may measure marked general or special ability in individual cases and by ascertaining the degree of spontaneity that characterizes certain activities and what is closely related, the natural impulse

[1] See article, Clinical Psychology and the Psycho-Clinicist, p. 123 *Journal of Educational Psychology*, March, 1911.

[2] See article Two Thousand Children Measured by Binet Measuring Scale of Intelligence, *Ped. Sem.* June 1911, p. 236.

[3] See Vorlesungen Vol. II, pp. 375-6.

to certain kinds of work, will doubtless result sometime in standards of direct use to schools.

Dr. William Stern of Breslau says in a recent article that society cannot afford to neglect the supernormal or gifted children. He does not mean by the supernormal the genius in the sense of Galton and Baldwin, but the child "that possesses in quantitatively superior forms capacities that are generally exhibited by individuals at large." According to Stern there are two types of gifted children, the specifically, and the universally supernormal. To the first type belong children who are exceptionally gifted in any one line such as music, mathematics, drawing, or painting, the technical arts, or in the learning of languages; to the second type belong children who seem to be endowed with superior mental powers in all lines of activity. "Those who belong to this group are the great intellects."

Stern cites the investigation which Kerschensteiner carried out on some 50,000 Munich school children to discover those who had marked artistic ability. The children were asked "to make free-hand drawings of specified objects, both from memory and from nature." In this way were discovered some children, in most cases the children of poor parents, who showed remarkable talent, that had in the majority of cases not been properly appraised by the school. Kerschensteiner saw to it that these children were assigned to art schools or arts and crafts schools where they would have the opportunity to develop these latent powers. "But," observes Dr. Stern, "what would have become of these children had not Kerschensteiner chanced to make his experiment? And how much similar talent may smoulder unrecognized in other places where no one thinks of making such tests?"

Stern protests against the practice of prematurely developing children who show marks of talent. These "child prodigy monstrosities" are "often prematurely developed gems of human talent," a sacrifice to the "avarice and passion for fame of deluded parents." "Quiet, harmonious, general development," should be the lot of all children.

J. Petzoldt in a pamphlet entitled, Sonderschulen für hervorragend Befähigte,[1] advocated the establishment of special schools for the exceptionally gifted. He also, according to Stern, suggests that in a large city like Berlin, the twenty most gifted pupils from Quinta (the second-year class in the Gymnasium) (age ten to eleven years), should be sought each year and placed in a special class. "If," says Stern,

[1] Teubner, Leipsic, 1905.

" suitable teachers are found for such classes and schools, and if they are not made too large their achievement may be quite extraordinary."

Groszmann[1] classifies exceptionally gifted children as pathological and non-pathological. The latter type may, as a rule, he says, be permitted to progress in school at their own rate, but there are special times, e. g., certain growth periods, such as puberty, when certain nervous tensions may develop, so that the physical health of such pupils needs careful watching. Under the pathologically gifted, Groszmann includes " the genius, the Wunderkind, and the idiot-savant." A real genius is a Wunderkind grown up. Leonardo Da Vinci was a genius of the general type; Mozart of the particular type. Mozart was clearly a pathological genius. Dr. Groszmann thinks that the following remark of young William James Sidis, the eleven-year-old prodigy who is said to lecture to Harvard professors on the fourth dimension, indicates that he is warped somewhat in his mental make-up. " He remarked one day: ' I wonder whether school children in future generations will celebrate this as a holiday because it was the day on which I began the study of the physical sciences ' "(!)

Barr[2] intimates that " backwardness and precocity in early childhood are indicative of an abnormal ego."

Dr. G. E. Shuttleworth would appear not to favor the attempt to develop the gifted, for he thinks that a marked departure from the normal in one generation in the ascending direction is but too apt to be compensated for by a corresponding deviation downward in the next, or at any rate, in succeeding generations. Nature dearly loves an average.

Galton[3] thinks that the real genius is bound to rise in spite of all obstacles. He says that the best care that a master can take of a genius is to leave him alone.

Hirsch[4] and Baldwin[5] both state that the influence of education upon genius may be important. Says Baldwin, "Many a genius owes the redemption of his intellectual gifts to legitimate social uses, to the victory gained by a teacher and the discipline learned through obedience. And thus it is, also, that so many who in early life give promise of great distinction fail to achieve it. They run off after a phantom, and society pronounces them mad."

[1] See article The Exceptionally Bright Child, Proceedings Groszmann School. 10th Anniversary, pp. 103-112.
[2] Mental Defectives, p. 125.
[3] Genius and Heredity, p. 34.
[4] Genius and Degeneration, p. 167.
[5] Social and Ethical Interpretations, p. 162.

Provisions for Gifted Pupils in Germany, France and England

The Realschule and the Gymnasium, which the German boy enters at nine years of age and in which an annual tuition fee of about $25 is charged; the lycee, which takes the French boy at ten or eleven and in which he lives, the annual charge being from $80 to $200; the great English boarding schools, which also receive their pupils at about ten and charge for tuition and board about $1,000 a year, are founded on the principle that a certain proportion of a nation's youth needs special educational advantages. These schools provide an opportunity, especially in Germany, for pupils with special gifts to make an earlier differentiation in their educational choices than is possible in the more democratic American schools. This doubtless leads to more scholarly foundations, and to a more efficient training in preparation for certain lines of professional work; this is especially true in the learning of languages. A boy of ten stands the monotony of the drill incident thereto much better and masters the difficulties of pronunciation much easier than does the boy of fourteen, the age at which the average American boy begins such work in the high school.

The German Volksschule has been said by some to lead into a blind alley, but provision is being made in some of these schools, notably those of Charlottenburg and Mannheim, for giving the abler pupils an opportunity to get an education commensurate with their powers. Ziegler[1] puts much emphasis on the right of the child to become something better than the father and different from him. He also says that the upper ranks of society need the new life and fresh blood from the lower social ranks to keep them from degenerating. On the other hand, Ziegler thinks that the schools should be so administered that the rank of the father should not be the means of gaining for the son a cultural or professional education when the abilities of the latter have marked him for an education in some trade. He says: "To advise that the son of Mr. Uppermost or Mr. President of the Government Board become a skillful watchmaker or cabinet-maker would (by the father) be regarded as a downright insult, as it was when I advised a father to allow his son to become a gardener." Yet the good of society demands that this be done in order to avoid producing a "cultured proletariat."

[1] See his Allegemeine Pädagogik, Teubner, Berlin 1905, p. 13.

Provision for the Gifted Pupils Under the Mannheim System

For many years the pupils of the Volksschule in Mannheim[1] have had the option of receiving French instruction three afternoons a week after regular school hours from 4:15 to 5:15 o'clock. There were certain objections to this plan, the chief one was the fatigued condition of the children after the long school day. This led the school authorities to do away with French instruction out of school hours and to arrange for special parallel divisions in the upper grades of the free Volksschule, for such pupils as had shown themselves fitted for the extra study by their industry and the quality of their work, especially in language, and whose parents desired them to take up the extra language. Those pupils were chiefly considered who intended to go into commercial work and would later attend the commercial continuation school where instruction in French is given.

The basal idea of the Mannheim system is the "adaptation of the means of education to the educability of the individual pupils." This new arrangement for meeting the needs of the more gifted pupils is in line with this idea.

The plan went into effect in the spring of 1909 and is carried out according to the following regulations:

1. The curriculum of the classes in a foreign language of the Volksschule is, including the number of hours per week, exactly the same as that for grades VI-VIII of the Bürgerschule.

2. Pupils composing these classes are chosen from the VI-VII and VIII grades of the *Volksschulen* of the entire city, including the suburbs, and receive their instruction in school houses centrally located in the Altstadt.

3. A one-year language course with four hours of instruction weekly, given out of school time (after four o'clock in the afternoon) must be taken by all fifth-grade pupils who wish to enter upon the work of the regular foreign language classes. These preliminary courses are given at the regular schools, the pupils taking such courses being members of the regular classes.

4. Such pupils of the fourth grade as have been regularly promoted and have received good reports throughout may be assigned to this preliminary course at the close of the fourth year.

5. At the close of this one-year preliminary course such

[1] See Mannheim Jahresbericht der Städtischen Schulen 1908-9, p. 21-22.

pupils as have made good progress in French and are also above criticism in the other subjects studied, in the matter of attainment, industry, and conduct are admitted to the regular foreign language classes.

6. Pupils whose work in the foreign-language classes does not come up to the standard are sent back to the regular classes.

Schools for Gifted Pupils in Baltimore, Maryland

Pupils who have done superior work in the sixth grades (with the sanction of their parents) are permitted to pursue additional subjects of high school grade while engaged upon the regular work of the seventh and eighth grades.

The studies generally taken are Advanced English, German, and Latin; in a few cases pupils have been permitted to take some of the first-year Mathematics.

Pupils selected for this work attend a school so located that enough pupils may be brought together to make it feasible to carry on departmental instruction. One such school was started in Baltimore in 1902 with 173 seventh and eighth-grade pupils. There were in March, 1910, four such schools in Baltimore, enrolling 571 pupils of the two upper grades. Selected pupils are allowed to remain in these schools for an extra year, thus being able to complete their high school work in two years. The great majority of pupils from these classes graduate from the high school in three years, their work in the preparatory classes saving them a year in their high school course.

Supt. Van Sickle writes thus of the practical working of the plan:

"By June, 1910, 236 (preparatory pupils) in all will have graduated. Of these, 41 were in the high school proper but two years; 120 were in high school three years and 75 four years. While these 75 pupils who, in the early days of the plan spent four years in the high school did not save any time, they enjoyed marked advantages. They earned 13,050 credits or an average of 174 each; whereas the number required for graduation was only 150." The high school records of these selected pupils, both as to honors taken and as to ability to cover the course in less than the required time, show that the preparatory work has been of value to them.

"The fact," says Van Sickle,[1] "that teaching can not be economically provided for less than three classes makes it

[1] Gifted Children in the Public Schools, The Elementary School Teacher. April, 1910, pp. 357-366.

necessary to organize the preparatory classes in selected centers."

Obstacles to the plan:

Parents do not understand it.

Some teachers are not in sympathy with it because it takes away their able pupils.

Only about a third of the pupils selected as eligible for the preparatory school actually go because of reluctance to go to a strange school.

Plans similar to that in Baltimore are in use in Boston at the Latin School; in Providence, R. I., at the Hope Street High School; at Portsmouth, New Hampshire; at Richmond, La Porte, Crawfordsville, Goshen, Madison, Indiana; at Joliet and Aurora, Illinois; at East Saginaw, Iron Mountain, Kalamazoo, and Grand Rapids, Michigan; at York and Lincoln, Nebraska; at Lead, South Dakota; at McAlister, Oklahoma; at New Orleans, Louisiana; and at Lake George and Warrensburg, New York.

These plans[1] practically carry out what is known as the "six and six plan"; six years of elementary school work and six years of high school work.

The Class Versus the Class-Individual Plan of Instruction

Opinions of Superintendents and Principals

Within the past few months I have sent to many of the leading superintendents and normal school principals in every state to gain first-hand information as to what was being done in the way of training teachers to recognize and meet the needs of individual children; and second, to find out what was actually being done, and also what ought to be done in the school-room in this direction. The results of these returns are to be considered more at length in another section of my study.

One question asked of both Normal School principals and superintendents was this: "Are you fully satisfied with the all class method of school instruction and if not, how would you modify it to meet the needs of slow and backward or other needy individual pupils?"

Of the 54 superintendents and normal school principals who answered this question 45 expressed themselves as not satisfied with the all-class method. One expressed himself as

[1] See article on Preacademic School, in Report of the Committee on School Organization to New York City Teachers Association, New York, 1910.

fully satisfied with the method, while eight gave answers that could not be interpreted either for or against. It will be interesting to read several of the answers as they will form a sort of introduction to the discussion of several plans of individual instruction.

"I do not approve the all-class method. A part of the time of the teacher should be given to individual instruction."

"I believe that in every school from half an hour to an hour per day should be devoted to work with individuals and that this hour should be during school hours."

"I am not satisfied with the all class method and am not using it but a part of the time."

"I would suggest that the pupils be given more time for independent study, during which time the regular teacher should work with the slow and backward pupils, asking such questions and offering such suggestions as will stimulate them to their best effort."

"No, give individual attention to such pupils as need it which includes most of every school."

"The class method of instruction has its obvious limitations. I should not want to abandon the class work, but supplement it with individual instruction."

"I know of no more well developed plan than the Batavia one. But suspect by a more thorough study by a larger number of experts still better results may be reached."

"I suppose the ideal way in which to attack this problem is to work for smaller classes. If this is not practical, then a special teacher to each group of six or eight classes may be the next best thing. Otherwise, in a closely crowded system of large schools each under a single teacher, I believe the best plan to be an unequal division of the class into two sections so that each of the slower pupils may receive a larger measure of the teacher's time than would otherwise be the case."

"I would not modify the class recitation. It is, properly conducted, the best educational instrument the teacher has. Individual pupils should have the teacher's attention outside of recitation."

"No, I like an adaptation of the Batavia system."

"A bit of personal experience may be in part an answer to the question and it may interest you. In 1896 the school committee of Waltham made arrangement with the Normal School at Framingham by which students who had finished their junior year might become assistants in different schools in the city whose need was greatest, to work with backward children. They were paid twenty-five dollars a month. Besides these workers we had an unassigned teacher of ability in the two large grammar schools whose work was with backward children and in doing substitute work in case of absence of any regular teacher. This plan was very successful in reducing the non-promoted children from a yearly average of about 20% to one of five to seven per cent. But in this work we never lost sight of what Dr. Harris and Dr. White call the 'community interest,' of the class as a whole. We need the 'community interest and not factional or group interests.'"

"The all class method is not satisfactory or adequate. This is coming to be universally conceded. We are setting apart periods for individual work. I should judge there might be some merit in the New York City plan of grouping."

"Every teacher should use every effort to help the unfortunate

even if it takes much extra time. I have not been able to devise a panacea for a recognized evil."

"If classes could be made small, not over thirty pupils to the teacher, and ungraded classes could be formed whenever necessary, for deficient children I should be fairly satisfied I think that backward children should have a measure of individual help but any scheme which devotes a disproportionate amount of effort to the dull pupil in an effort to make him accomplish as much as the brighter member of the class is both futile and dangerous."

"I am fully satisfied with class methods. There is no 'the class method' for there are several. A class method that really develops a method in which the teachers' aim in any given subject is to separate the subject into its elements, to arrange these elements in logical order, and then to bring the class face to face with these elements one after the other in this proper sequence and in proper time, is the quickest and surest means of reaching the so-called backward, or slow child."

It is thus evident that probably a large majority of school men are in favor of, and earnestly seeking for, some plan of meeting the needs of the individual children. The opinion last read expressing approval of the all-class plan was rather the prevalent one ten years ago. It is encouraging to know that the trend of opinion is in the opposite direction.

We shall next consider three plans of school instruction that have placed great emphasis on individual instruction: first, the Pueblo plan; second, the plan in use in Newton, Massachusetts; and last, the Batavia system of class-individual instruction. The Pueblo, or Search plan, makes instruction almost wholly individual and is in a way a return to the old unguarded school; the Newton plan has retained many of the good features of the Pueblo and eliminated many of the questionable ones; while the Batavia plan is more systematic than either of the other two in that it assigns a definite amount of time on the daily program which is to be devoted to individual instruction and presents a rather definite technique which such instruction is to follow.

Plans of Instruction for Reaching the Individual Pupil

The Pueblo Plan

The Pueblo or Individual Plan of instruction was developed by Mr. Preston I. Search while superintendent of Schools in Pueblo, Colorado.

The plan is essentially a return to the individual organization of the school which prevailed for centuries until La Salle late in the seventeenth century discovered the value of class instruction. Indeed the individual method existed in Scotland as late as 1886 in some of the very best schools.

Under this plan each pupil is a class going ahead as fast as he is able or thinks he is able. The teacher hears every pupil recite that portion of the work that he has been able to prepare. The Pueblo plan was applied in both the high and elementary schools. The working day in the high school was divided into six periods each one hour long. One regular period each day was given to physical training in the gymnasium, while on alternate days another period was devoted to manual work. This arrangement allowed 4½ hours each day in which to do the work in the regular high school studies. To quote from Mr. Search, "Three periods a day are definitely assigned to the three literary studies carried on together; the additional 1½ hours is regarded as extra to be spent wherever the pupil needs it most, or in some cases according to his individual bent. In the lower classes the assignment of this extra time is left to the teacher; in the two higher classes it is left to the student. In the high school the work is conducted by departments and hence a field program is followed. In grades below the high school, the work is entirely by flexible programs, excepting as certain studies are arranged so as to systematize the time of certain teachers. The studies do not always come in the same order and hence all studies can share in the advantages of the stronger hours of the day. The time is not apportioned by rule, but is left entirely to the judgment of teacher. The working periods are longer than is usual elsewhere. In the primary grades the methods are largely those of the kindergarten. Indeed, it may be added that the entire plan of the school finds its keynote in the application of the principles of the kindergarten to every department of school work."

The class recitation as ordinarily conducted was abolished because it reflected on the honesty of the pupils' preparation and because it wasted so much of the pupils' time. The school was transformed into a sort of laboratory; the office of the teacher was to pass from desk to desk, inspiring, directing and correcting each pupil at his work. The recitation and examination are wholly individual and each pupil, to use the words of Mr. Search, "actually and absolutely recites every chapter and line of his Latin, every section of his other studies, and passes his examination in the most thorough manner." The class exercise is used by the teacher at the beginning of a working period for presenting new principles and for giving general directions.

In the elementary schools the plan is somewhat different. The work of a given class is concerned with some subject, as percentage. Some of the pupils will do a minimum amount

of work, while others will accomplish much that is supplemental. There are no fixed methods; each teacher is allowed to attack the work in her own way. The subjects of the course of study are so arranged that those of each succeeding grade are anticipated in such a manner in the preceding that to pass from the working section of one grade to that of the next higher is not difficult. The flexibility makes promotions from grade to grade an easy matter.

"The plan," according to Superintendent Search, "is intended to care better for the so-called 'backward' pupils. The system of grading that compels the pupil who is behind his class to drop out of school, is not right. Somewhere along the line there must be a place for every pupil, be his advancement or progress what it may. Teachers are instructed to provide carefully for the discouraged pupil and to give more time to the lower half of the school, remembering that the bright ones may always be cared for by supplemental or advanced assignment of work." The advantages and results of the plan, as summarized by Supt. Search, are as follows:

"1. Better health.

"The pupils do their work in school; the other hours of the day are devoted to recreation and the relaxation that comes from change of work.

"2. It results in making trained, independent, self-reliant workers. The pupils have definite work to do, a definite time to do it, and they work under the direction of trained teachers and they are obliged to render an accurate account of the work done. Such work tends to beget self-reliance and independence. Each pupil stands or falls on his own merits. The work is all done at school, no parental help and no helping by fellow pupils.

"3. There is more work accomplished and it is more thoroughly done.

"4. There is more enthusiasm in the work. The dull and listless recitation with the time consumed listening to dull and poorly prepared pupils is done away with. Each pupil realizes that he has a chance to do his best and to advance according to his ability, hampered in no way. He develops a love of work and is filled with the enthusiasm that results from real accomplishment.

"5. There is less discouragement. Every boy and every girl has a place in the school and a chance to do his or her best. There is no such thing as failure to be promoted. Each pupil is promoted each day.

"6. There is more opportunity for additional and outside work. There is time for pupils to read good books, attend

lectures, and to do many other things outside of school that are as much a part of education as school work itself.

"Individual work of the kind mentioned calls for strong teachers, teachers who are more than lesson-hearers, who are masters of their subjects, and ready to point the way to the pupil at any stage of his progress."

We have discussed the individual plan somewhat in detail because school men in general have been somewhat disposed to ridicule it. The plan, however, as worked out by Supt. Search has so many points of excellence that it is worthy of serious study.

That in seeking to obviate the defect of the graded school, Supt. Search was led to slight certain well-established points of excellence in the class-method of instruction and organization, cannot be doubted.

Individual Work at Newton, Massachusetts

We find in the school system of Newton, Massachusetts, the nearest approach to a realization of the ideals for which Search rightly contends in his book, "The Ideal School." Of course, individual teaching is not carried to the extreme which makes it destructive of what there is good in class work, but the individual child is made the focusing point of the whole school system and toward the middle point the teaching power is directed. The work at Newton, under Dr. F. E. Spaulding, is based on the thesis that "such a modification of the rigid system of gradation and promotion is necessary as will make it possible—nay necessary—for each pupil to work as hard, as actively, and as independently, and to advance as rapidly as his sound and well-balanced development requires. It means, equally, a modification which will insure that no pupil be dragged suddenly and kept perpetually beyond his depth in the ocean of knowledge, but that each one, by his own actual efforts, build a stable foundation on which he can advance and rise securely, if ever so slowly."

The plan of reaching the individual is made effective by the employment of unassigned teachers.

The unassigned teacher has no regular class. Her work is supplementary to the class work of several teachers.

"The day's work of an unassigned teacher may be something like this. For the first half-hour in the morning there comes to her room a little group of a half-dozen children from a third grade. The third-grade teacher has selected these children because they are all having difficulty, beyond that experienced by their classmates, with some process in arithmetic, perhaps it is multiplication or division. The unassigned teacher has previously been informed as fully as

possible concerning the condition and needs of these children. The half-hour is spent in discovering still more accurately the peculiar difficulties of each one, and in giving each just the assistance and practice which he requires. This work is individual so far as need be; at the same time the group can usually work together advantageously.

"At the end of the half-hour these children return to their class, and a group of children come from the seventh grade; perhaps there are only four in this group. They are not having unusual difficulty with any subject. Quite the contrary; they need more work and more difficult work than their class as a whole is capable of. Yet they are not fitted to pass at once successfully into the class next above theirs. The unassigned teacher prepares them for this long advance step. She takes them through the essentials which separate the work of their present class from that of the class which they are preparing to enter. To-day, and perhaps for several days, the work is in arithmetic. Other days it will be history, or geography, or grammar.

"When the period is over, these children give place to a group from a fourth grade. The members of this group are neither having unusual difficulties nor are they capable of more than their classmates. They are temporarily behind the work of their class. There has been an epidemic of measles in their room and they have been kept out for several weeks on account of illness or exposure. The unassigned teacher's work with these will be similar in purpose to that with the last group; she will take them rapidly over the essentials covered by the class during their enforced absence.

"The unassigned teacher's fourth period is occupied with a full division, perhaps twenty pupils, of children of the fifth grade. They come from a large class composed of two grades, the fourth and the fifth. To relieve the regular teacher of some of her many recitations, the unassigned teacher takes the work in arithmetic with the fifth-grade division.

"The fifth period is devoted to a single child. He does not belong to any grade, judged by the evidences of ability which he shows when assigned any definite task. So he probably comes from a class in which he is not too conspicuous on account of his size. The unassigned teacher tries patiently to determine just what the serious obstacles in the child's advancement are. He may have to be sent to a special class for backward children. Possibly, with sufficient individual attention, he can work into some regular class."

Thus the work of the unassigned teacher goes on throughout the periods of the school day. Sometimes she works with pupils who are trying to gain a grade, more often with those who are behind in their work and need special aid to catch up with the class, or again, she works with individual children whose peculiarities of mental endowment place them out of adjustment with regular school work.

In Newton there are also unassigned teachers in the high school.

The great drawback to this kind of work is the difficulty in securing experienced teachers who are fitted for this special work. The ordinary teacher by training and experience is so

thoroughly embued with the idea of class teaching that it is hard for her to realize the significance of individual teaching.

The work in Newton is done by the most promising graduates of the normal schools, who, according to Supt. Spaulding, take up the work much more readily than do experienced teachers.

This would seem to suggest a fault in our present methods of training teachers, in that they are given no abiding conception of what individual teaching means. It also suggests a fault in our present system of school organization which is usually so ordered that the teacher comes into contact with the class mind to such an extent that she forgets the individual units and does not possess the ability to reach these lesser units.

At Newton the endeavor has been to eradicate from the minds of teachers and principals the idea that every pupil must begin the work of a grade in the fall and complete it the following spring, and that every pupil who fails must repeat the work of the grade where the failure occurred.

The fact has also been emphasized that real promotion is not a thing which takes place at stated periods but that it is continuous from day to day, if the work of the school is properly individualized.

Promotion is by subjects rather than by grades. The range of variation among the different pupils of a class in the different subjects may be several months. In no case is it more than a year. Frequently the same teacher has charge of a class for two years, while often it is found advantageous to transfer individuals or groups from one teacher to another. The fundamental idea of the whole system is the best good of the individual, not his rapid passing through a number of grades. "Better grasp of subject-matter, better training in independent thinking may mean slower advancement for one pupil than for another."

Yet when the pupils and the parents understand that honest and independent work is what counts and that the school is so ordered that individual achievement is made possible at every point in the course, it is safe to say that as much progress will be made by all pupils as under the plan of rigid promotion and that the progress of the majority, so far as real education is concerned, will be vastly increased. Thus it is seen that at Newton there is no uniform plan of organizing a class for individual work. "Such a plan," according to Supt. Spaulding, "would defeat the very purpose of this work. In some subjects the pupils work, in constantly changing groups, there being two, three, and sometimes even four

groups within a class in some particular subject. Individuals are ministered to according to their needs but the individual works alone only until he can be classified with some group."

Class-work occasionally takes the nature of explanations and discussions on new topics, more frequently the nature of class drills on mechanical work; or again, topics which have been studied by the class-members individually may be taken up in review by the class. The problem work is largely individual, each pupil depending on his own efforts and solving as many as he can.

As a means of advancing from a lower to a higher group, a pupil may do the work of both groups in certain sequential subjects.

The actual working out of this plan is described by principal Charlton D. Miller of the Hyde School District in Newton:

"1. One class, a combination of first and second grade pupils, is composed of fifteen of the most promising pupils of a large first grade in September and the B, or lower section, of the second grade. In all probability, most of the first grade class will enter on third grade work during the early part of the next school year.

"2. In the fourth grade, a group of seven will probably reach the sixth grade in June or early autumn. The plan for accomplishing this is simple and the work not unreasonably hard for the teacher. Arithmetic requires no extra time on the part of the teacher, as the pupils work ahead individually during the regular period for that subject. Language admits practically of the same handling. In reading and geography there are separate divisions.

"3. A group of six pupils from the A section of the sixth grade, working under special provision, will, doubtless, complete the work of grades six and seven and take up eighth grade work soon after, if not at the opening of school in September.

"The entire class is considerably in advance of the grade work. Seventh grade geography will be completed by all members of the class.

"With the arithmetic taken care of by the individual classification, only history and grammar remain to be planned for specially, which is easily accomplished by the teacher without any outside work.

"Grammar is given on alternate days; and the lessons being correspondingly longer, the ground can be covered. Advanced history is given while the rest of the class do language work.

"4. Seven pupils from the A section of the seventh grade are working for an early promotion to grade nine. There is every indication that this will be accomplished in time for the completion of ninth grade work by the end of the next school year.

"Here again the work will be conducted by the teacher in regular school hours, with the exception of geography which is being taught by the special assistant. These pupils have nearly completed seventh grade work in some subjects, and are working in separate divisions in history, geography, and grammar, preparing and reciting on alternate days. History and geography may not be entirely completed by June; and, in that case, study continues during the summer or early autumn, and examinations are taken.

"5. There have been the following cases of recent, individual promotions.

"A pupil has been promoted from the A section of the second grade to grade three, because of conspicuous ability as shown in class work, with evident capacity for advanced work.

"Two pupils have received a promotion from the fourth grade to the B section of the fifth grade because of the same conditions.

"Another typical promotion of this kind was that of a boy from the A section of the fifth grade to the A section of the sixth grade. In a case of this kind, there is some sixth grade geography to be made up. This is directed by the teacher who promotes the pupil."

The Batavia Plan

Class-Individual Instruction

Class-individual instruction, better known as the Batavia System, had its origin in the town of Batavia, N. Y. The history of this origin is very interesting. There was an overcrowded room of some sixty pupils in one of the Batavia schools. By a fortunate suggestion on the part of Superintendent John Kennedy it was decided to relieve the congestion by putting an additional teacher into the room instead of taking a class out. This teacher was Miss Lucie Hamilton and to her rare personality and superior teaching power is due largely the initial success of class-individual instruction.

Miss Hamilton was not an assistant to the room teacher. Her rank was coördinate but her work was entirely different. It was to be wholly with those pupils who for one reason or another were behind their class. She was to work with these pupils individually until they were able to work with the other members of the class. She was to work with the laggards until they were able to work with the leaders. From this individual teacher, class-individual instruction took its rise. For the first time in the history of education a teacher had been assigned to deal with backward pupils in a humane way. Up to this time they had been neglected or else classed by themselves in rooms for backward pupils and with the spur that comes from an aggregation of dulness they were supposed to succeed. Now they were to be kept with their fellows and given the opportunity to succeed. And they did succeed. After a few months of class-individual instruction, it was evident that a marked change had taken place in the first of two-teacher rooms. Pupils who had been considered very dull began to improve, and some of them were soon up among the leaders. There was only one way to explain the really marvelous change. The reason lay in the work of the teacher, who hour after hour, and day after day, had called the re-

tarded and backward pupils to her side to find the difficulties, and to encourage them to overcome these difficulties.

There was a change not only in the working ability of the pupils, there was a change in their attitude as well. The whole atmosphere of the room was changed. All were happily at work. There were no bright pupils with nothing to do, and no dull pupils who could do nothing. The standard of work was gauged by what the ablest pupil could do, and all the pupils were soon well up to the standard.

So the good work went on in that room, and then the test came. Would the plan get similar results in other overcrowded rooms? Additional teachers were placed in other overcrowded rooms, and the results were as good as those of the original two-teacher room. It was thus shown that the success of the plan was not due to the personality or ability of a specially gifted teacher.

The success of the plan was so great that the superintendent and school officials began to think that the two-teacher room, with the combination of class and individual instruction, was the only solution of the problem of the dull and backward child. But after the two-teacher plan had been in successful operation for a year, it dawned upon Superintendent Kennedy that success was due not to the two teachers but to the two kinds of teaching. It was the happy blending of individual with class instruction that was obtaining the results. So after thinking the matter out very carefully, he announced to the teachers of the regular grade rooms that they also were to give individual instruction. He tells us that they looked astonished and asked how it was to be done. His answer was that half the school time was to be taken for individual instruction and half for class instruction. Some of the teachers doubted; some protested, saying they could only get the pupils along by giving all the time to class work and to expect the work to be done by devoting one-half the time to the dullards was simply preposterous.

"Well," said the superintendent, "the only way to tell is to try it. We have the old school plant intact. We have torn nothing down; and if the new plan proves a failure it will be an easy matter to go back to the old way. All I ask is that you give the new plan a thorough trial."

And they did—and no teacher went back to the old plan, and no teacher has ever wanted to go back. In this way the Batavian System had its birth. Its success in the single-teacher rooms was as marked as that in the two-teacher rooms. It met with like success in the rooms where one

teacher taught two grades, and it has met with success in schools where the teacher has many grades.

Briefly, then, class-individual instruction is a systematic plan for helping slow and backward pupils to help themselves. We know that it has wonderful power to open the minds and hearts of children, both large and small, and cause them to unfold and grow. Col. Parker has said that the best results of the Quincy idea was a more humane treatment of little children. The best result of class-individual instruction is a more humane treatment of all children, large as well as small. We have been sacrificing millions of our children to the machinery of the graded school system. We have been trying to mechanize education. Class-individual instruction seeks to humanize this mechanism. It is only sympathy and common sense combined. For years we have been writing and talking about the individual child but we have been doing very little for him. Class-individual instruction does something for the individual child.

The idea of the system is really very beautiful. Here is an intelligent, sympathetic teacher, studying her flock to find the needy ones. She calls these needy ones to her side, one after another, and talks with them, and encourages them, points out their difficulties, and leads them to master these difficulties. She points the way,—she leads, they work and gain the power. The thing most needed in our schools is systematic, sympathetic individual help as an aid to class instruction. The plan we are considering gives this systematic, sympathetic, individual help.

What has the plan done for the children of Batavia?

It has given them the spirit of work and the power to work. The spirit of work is everywhere in all rooms. The pupils, all of them, attack difficulties with confidence and self-reliance.

You know there is a saying that "he who can is king." The children of Batavia *can,* they have power; they can do things; they are kings of their work. They attack diffities without shrinking or cringing; and they master things usually. In case they are not able to master a difficulty, there is someone ready to point the way to mastery. The individual teacher is a leader rather than a helper. She has travelled the road and knows the way. She says to the pupil, "This way, follow me." The pupil follows but does the climbing himself; there is no boosting by the teacher.

The person who thinks that individual instruction means doing the work for the pupil misses the point entirely. The teacher works with the pupil, not for him. She gives him

sympathy in his difficulties, but she never becomes so sentimental as to do his work for him. She encourages him by telling him that the difficulties he is meeting are such as all who have traveled the road of knowledge have met and mastered and they are such as he may master if he will put forth the effort. The successful teacher under the class-individual instruction plan is a sympathetic, patient, courageous leader and as such she develops sympathy, patience and courage in her pupils.

The late Professor Hinsdale, in his excellent book, "The Art of Study," tells us that nowhere in this country is the art of study adequately taught. He then tells us that children must learn to study by studying under intelligent direction. The intelligent direction is the teacher's work. It means directing in the right way, time, and place. Teaching is causing the pupils to learn through intelligent direction. The pupil must do the work, do the studying himself. The pupils at Batavia know how to study and they study. They work and are happy. They have time for study and they use that for study. The great cry all along the line is, that children do not know how to study. How can they know if we do not give them the opportunity to learn? Direct them intelligently, give them something definite to study and then hold them responsible for the work assigned and you will find the children will develop the power to study.

The fault with most teachers is that they help either too little or too much. In one case the result is discouragement; in the other it is loss of power. To let a pupil wrestle with difficulties that he cannot master, is bad; to help him over difficulties that he can master with proper direction, is perhaps worse. Individual instruction aims to teach the pupil how to study by giving him something definite to study, with proper direction in case of need.

The children at Batavia have the power of independent work. There was no deception on the part of the pupil, no trying to tell something that the pupil did not know was right, in the hope that it might happen to be right. This habit of bluffing is perhaps the worst trait possessed by school children to-day. It is the attempt to get credit for something that is not the pupil's own possession. It is the direct result of the present system of class teaching, when the teacher is a tester and not a true teacher; where it is a disgrace to confess ignorance and to say, "I don't know." If a pupil in Batavia does not know a thing, he says so frankly, and is either told to look it up, or at the next individual period he is taught what he did not know. There is no premium placed on superficial

word repetition. There is no attempt to deceive the teacher; such an attempt would fail because the teacher knows her pupil. Her work is teaching not testing. She tests, of course; but she tests that she may teach; she does not teach that she may test. There is a great difference between the two kinds of work. The pupils are working for knowledge and power, not for a high per cent. on report cards. If the plan did nothing more than eliminate deception from class recitation it would be a great blessing.

Some of the chief merits of class-individual instruction are its provision daily for a definite amount of individual instruction and its insistence that this time be given to those pupils who are most in need.

It also lays stress on the fact that instruction is to be given at the point of greatest need rather than on the daily lesson. This is one of the main principles of efficient individual teaching, yet it is the one that it is hardest to get teachers to apply. Real individual teaching goes back, back until it reaches solid ground and there it begins to build.

The plan also provides the supervised study-period. The plan has been criticised because it devotes too much time to the backward pupils. It does devote a large share of the time to the backward pupils because they are the most needy but in case the bright pupil shows that he needs individual instruction he receives his share.

Opinions of Teachers on Individual Instruction

It is interesting to read what teachers who have used individual instruction systematically in the school room for a period of several years say as to the relation between pupil and teacher brought about by its use. Here are some bits of testimony from teachers of Westerly, R. I., where individual instruction is a regular part of the daily work. A department teacher of the seventh and eighth grade writes:

"The strongest argument that I know of in favor of individual work is the opportunity it gives the teacher to win the confidence and understand the personality of the pupil. Especially is this true in departmental work, where, as in my case, there are upwards of one hundred thirty dispositions with which to deal."

Another seventh-grade teacher writes:

"There is closer sympathy between teacher and pupils. The pupil is reached in a way that no other method reaches him."

A fifth-grade teacher:

"Teacher and pupil understand each other better, are drawn

closer by questioning, and oftentimes a study once looked upon as a bugbear becomes one of pleasure and much profit."

A departmental teacher in geography and science:

"I have observed a much more perfect understanding of pupil by teacher and vice-versa. Many cases of discipline have been most pleasantly adjusted through the use of this period. Many unpleasant happenings have been avoided by a timely talk, a suggestion given, or the case at hand clearly put before the pupil. When the way is clearly pointed out many follow carefully. In the case of new pupils, I have reached many through individual periods, have had them interested and reciting well in a short time, whereas I would not have established an acquaintance so soon had it not been for the individual periods. This is especially noticable in the case of children who are timid, who come from other schools, or from environments quite different from that of an average pupil."

A fourth-grade teacher:

"There is no doubt about individual instruction bringing pupil and teacher into closer relations. It broadens the sympathies of the teacher for the pupil. By it, the real difficulties and problems of the child are discovered. I have found children failing from poor sight or hearing, some whose minds were distracted from their work by regularly frequenting the "cheap show," and some who were purely lazy and needed to feel the pressure of compulsory work. I do feel that the opportunity that individual instruction gives me to know my children is very valuable. The personal contact with the teacher should and does mean much to the pupil."

Third and fourth grade:

"As a result of this work there is a pleasant atmosphere in the room. Pupils do not become discouraged. They know they will be cheerfully helped. The teacher is able to know the pupils better, and pointing out his weak points to him while he is near her at the desk is more graciously received than if done in the presence of the whole class. I have never had a pupil who did not accept the individual help in the right spirit."

Mixed room:

"I think as a result of the individual system, the teacher and pupils become better acquainted with each other. There is a closer sympathy and a better understanding. The teacher sees more clearly the obstacles the child has to encounter, and the child learns to think of his teacher as a friend who will help him."

First grade:

"I think that the pupil and teacher are brought more closely

in touch with each other by this system than by any other. I would not have missed the close relationship for a great deal."

These bits of testimony are chosen at random from a considerable number. They represent fairly well the testimony of almost all the teachers who have used individual instruction for any length of time.

In presenting these views no claim is made as to the superiority of the Batavia System over many other plans. It has, however, the one advantage of being systematic. Under it the work is done daily. It is based also on certain definite principles which must to a large extent be common to all plans of individual work, that are effective, which if carried out intelligently cannot fail to win success.

Suggestions for a Plan

A plan approaching the ideal would be a synthesis of the excellent features from many of the plans that have been presented. The work would be based on what might be called a course of study in the fundamentals: this work would be so graded as to be within the powers of all normal children, both quick and slow. To it would be added a course in optional topics to be studied by the abler pupils largely by themselves, in order to develop initiative and self-direction. A record of such work would be made in the pupil's personal record book which should accompany him through the grades.

Beginning, perhaps, at the sixth grade the work would be somewhat differentiated without in the least breaking up the class organization.

For two hours a week on alternate afternoons, as in Switzerland, certain of the pupils would take work in a foreign language while the rest of the pupils could take hand work. The aim would be to keep the classes small, not more than thirty pupils in each of the two lower grades and not more than thirty-five in the other grades. In order to get the number of pupils in the two lower grades, large classes of forty to sixty pupils would be divided, one-half coming in the morning, the other half in the afternoon.

This plan of half-day sessions for the two lower grades has been carried out with success for years in several places. The first grade and perhaps the second would be divided into two divisions of ten or fifteen pupils each. This would reduce the seat work and its supervision to a minimum. Often in the second grade and in all the grades above, the class would recite and study as a whole and during the study

periods the teacher would help individual pupils, usually singly, sometimes in groups of two or three, but rarely more, The chief feature of the plan would be the supervisor of individual work. This teacher would be in charge of the work of four or six rooms. In her hands, would be the school welfare of all the individual pupils in these four or six rooms, but she would care especially for the abler pupils and also for the slow and backward. She would spend an hour or more every day in each of the rooms under her charge, teaching needy pupils whether quick or slow. When an abler pupil had been promoted out, of course she would see that he was adjusted to the work of the new grade. She would also look after pupils coming from other schools to see that they did not lose time by their change. Accompanying the pupils, as she would through a series of years she would come to know each pupil's peculiarities and be able to protect him from the injury that so often comes from a change of teachers. This teacher would, furthermore, have special knowledge of mental defects and be able to advise with teachers and parents, in regard to children with such defects. She would combine with her other work that of the friendly visitor, and thus bring the school and the home into closer coöperation.

Such a teacher could work under almost any plan of grading. The plan of having such a teacher has been anticipated in a way in many places with this difference, the individual teacher has often been a woman of little experience both in teaching and in life. What is wanted is a woman of maturity—a real school mother, who has a cosy corner in her heart for every child, who is imbued with the missionary spirit, and is bound to have every boy and girl under her charge have a fair chance.

With our schools so organized as to grading, following in the main this fundamental course of study, with both the class teacher and the individual supervisor doing individual teaching, and what is still better, personal work, both inside and outside of school (and with the really defective pupils in auxiliary schools), there would be little need of such separation of pupils as that at Mannheim, and there would be the best chance for every pupil to become a self-respecting, successful American citizen, one who could look the world in the face and say, "I am the master of my soul."

BIBLIOGRAPHY

AYERS, L. P. Laggards in Our Schools, Charities Publication Committee, New York, 1909. 236 p.

BARNES, HAROLD. The Group System of Teaching. Unpublished Study.

BRAHN, MAX. Die Trennung der Schüler nach ihrer Leistungsfähigkeit. *Zeitschrift für Schulgesundheitspflege.* Hamburg 1897. No. 7 and 8, pp. 385-398.

BURK, C. F. Promotion of Bright and Slow Children. *Educational Review,* 1900. Vol. 19, pp. 296-302.
Explaining the method of grading used in Santa Barbara, California, 1898-99.

CHASE, LYDIA GARDNER. Public School Classes for Mentally Deficient Children. *Charities and Corrections,* 1904, pp. 390-401.
Historical account of the development of public school classes for the mentally deficient in the United States and in foreign countries.

COLLAR AND CROOK. School Management and Methods of Instruction. Macmillan and Co., New York, 1905, p. 336.

DEUCHLER. Uber das Mannheimer Schulsystem. *Zeitschrift für Pädagogische Psychologie, Pathologie und Hygiene,* 1908-9. Vol. 10, No. 6. pp. 384-421.
Contains an excellent account of the Mannheim System.

EDSON, ANDREW W. Group Teaching in the Elementary Grades (in Report of Proceedings of 63d Annual Meeting, New York State Teachers Association). *Education Department Bulletin,* No. 457, pp. 307-311.
Contains suggestive programs for carrying out work.

———. Special Plans for the Promotion of Backward Pupils. *Kindergarten Magazine,* 1906-7. Vol. 19, pp. 397-403.

ENDERLIN, M. Zur Mannheimer Schule Reform. *Die Deutsche Schule,* 1905. Vol. 9, pp. 137-149; pp. 201-215.

———. Die Neuorganisation der Volksschule in Mannheim. *Die Deutsche Schule,* 1904. Vol. 8, pp. 24-37; pp. 86-100.

FINDLAY, J. J. Principles of Class Teaching. Macmillan, London, 1902. 442 p.

GARBER, JOHN P. A Rational System of Classification and Promotion in Elementary Schools. *Education,* 1907. Vol. 27, pp. 288-302.

HARRIS, WILLIAM T. Class Intervals in Graded Schools. *N. E. A. Proceedings,* 1900, pp. 332-340.

HUTTON, THOMAS B. Classification and Gradation. *School Review,* 1908. Vol. 16, pp. 543-550.
An application of the so-called Cambridge plan to all the grades.

Jahresbericht über den Stand der dem Volksschulrektorat unterstellten Städtischen Schulen in Mannheim in Schuljahr, 1908-09. Mannheim, 1909, p. 86.

JONES, OLIVE M. Teaching Children to Study. The Group System Applied. New York, 1909.
Contains a full account of the Mannheim Special Class System.

JONES, W. FRANKLIN. Study of Grading and Promotion. *Psychological Clinic,* May and June, 1911. pp. 63-96; 99-120.

KLAMER, C. S. Die zurückgebliebenen Kinder in der Volksschule. Vortrag, Heft 77 der *Pädagogischen Abhandlungen.* A. Helmich Bielefeld.

Contains suggestions for dealing with the less gifted by arrangements within the classes. Opposes the Mannheim System.

LANDON, J. School Organization. London, 1889. 117 p.

LANGE, K. Die Schwachen in der Schule. *Pädagogische Studien,* 1901. Vol. 22.

Opposes the Mannheim System.

MAHONY, JOHN J. The Problem of the Poor Pupil. *Education,* 1908. Vol. 28: 197-212.

Treats the problem of the backward child and the failure of the schools to reach him.

PRETZEL, C. L. A. Gegen die Mannheimer Schulorganisation. *Die Deutsche Schule,* 1904. Vol. 8, pp. 603-618.

PRINCE, J. T. School Administration. Syracuse, 1906.

RICHMAN, J. A Successful Experiment in Promoting Pupils. *Educational Review,* 1899. Vol. 18, pp. 23-29.

RICHMAN, JULIA. Special Classes and Special Schools for Delinquent and Backward Children. *Charities and Corrections,* 1907. 232 p.

RIGLER, F. Principles of Classification in the Thirty-sixth Annual Report of the Public Schools of Portland, Oregon, 1909, pp. 107-113.

SEARCH, P. W. The Pueblo Plan. *Educational Review,* 1894. Vol. 7, pp. 154-170.

WINCH, W. H. Notes on German Schools. London, 1904. 264 p.

WINZER. Die Mannheimer Schulorganization. *Zeitschrift für Philosophie und Pädagogik,* 1906. Vol. 13, pp. 355-363.

Report of Dr. Sickinger's lectures before the Summer School at Jena, 1905. Very good presentations.

YOUNG, ELLA FLAGG. Grading and Classification. *N. E. A. Proceedings,* 1893. pp. 83-86.

For further information on classification, retardation and elimination of pupils, and the formation of special schools and classes, see Volumes of Proceedings of National Educational Association, and Volumes of the "Psy. Clinic" especially.